

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled).
2. (canceled).
3. (canceled).
4. (canceled).
5. (new) A device for generating X-rays comprising:
 - a source for emitting electrons accommodated in a vacuum space;
 - a liquid metal for emitting X-rays as a result of the incidence of electrons;
 - a pumping means for causing a flow of the liquid metal through a constriction where the electrons emitted by the source impinge upon the liquid metal;
 - a window for bounding the constriction at least in part, the window being transparent to at least electrons and X-rays and serving to separate the constriction from the vacuum space; and
 - a wall for bounding the constriction at least in part, the wall being at least substantially opposite to the window and having a taper associated therewith,wherein the constriction has a cross-sectional area relative to a flow direction that increases so that during operation in the flow direction, a decrease of a flow velocity causes a decrease of a pressure of the liquid metal in the constriction substantially corresponding to an increase of the pressure resulting from the decrease of the velocity.
6. (new) The device of claim 5, wherein the taper associated with the wall tapers relative to the window, seen in an upstream direction opposite to the flow direction.
7. (new) The device of claim 5, wherein the wall is deformable by means of at least one actuator, the device having at least one pressure sensor for measuring the pressure of the liquid metal in the constriction and a control member for controlling the actuator as a function of a pressure

measured by means of the sensor.

8. (new) A device as claimed in claim 7, wherein the actuator is a piezo-electric actuator.